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## Remarks

Reconsideration of claims 1-15 is respectfully requested.

In the Office action dated March 10, 2003 (application Paper No. 03083004), the Examiner rejected the pending claims under 35 USC §§ 102(e) and 103(a). The Examiner's various rejections will be discussed below in the order appearing in the Office action

## 35 USC § 102(e) Rejection - Claims 1, 3 and 9-15

The Examiner first rejected claims 1, 3 and 9-15 under 35 USC 102(e) as being anticipated by US Patent 6,657,775 (Farmer et al.). The Examiner cited Farmer et al. as teaching "a system for amplification of WDM signals" including a "radio frequency modulated pump source" and a "transmission fiber", and a signal generator "for generating an RF signal having a frequency modulation depth; and a modulator (31) responsive to the optical source and the signal generator".

In response, applicant asserts that Farmer et al. <u>cannot</u> be found to anticipate the subject matter of claims 1 3 and 9-15. First, the arrangement of Farmer et al.'s FIG. 3 cited by the Examiner is an illustration of a 'narrow linewidth' laser signal source, not "an RF-modulated pump source". The Examiner is directed to the specification at column 5, beginning at line 60 for a discussion of the use of an "external modulator" (element 32), in combination with phase modulator 31 to generate a narrow linewidth output for incoherent laser source 30. It is to be presumed that the elements of FIG. 3 could be substituted for the "optical signal source" 42 in FIG. 4 of Farmer et al.

It is asserted that there is no teaching in Farmer et al. of reducing crosstalk in a Raman amplified WDM system by applying an RF-modulation signal to the <u>pump signal input</u>, as defined by the rejected claims. Indeed, as defined in claim 1, the "modulation frequency and depth" of the modulation signal are "determined so as to increase pump power transferred from the pump to the plurality of N input optical signals". No such arrangement, teaching or disclosure is present in the cited Farmer et al. reference.

Given this lack of teaching, applicant asserts that Farmer et al. cannot be found to "anticipate" the subject matter of the present invention as defined by rejected claims 1, 3

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and 9-15. Applicant therefore respectfully requests the Examiner to reconsider this rejection and find claims 1, 3 and 9-15 to be in condition for allowance.

## 35 USC § 103(a) Rejection - Claims 2 and 4-8

The Examiner further rejected claims 2 and 4-8 under 103(a) as being unpatentable over Farmer et al., with the subject matter of the additional claims being considered as obvious to the skilled artisan. For the reasons as cited above, it is asserted that Farmer et al. does not "anticipate", disclose or suggest the subject matter of the present invention as directed to the use of an RF-modulated pump source to minimize cross talk in a WDM system utilizing Raman amplification. Thus, applicant asserts that claims 2 and 4-8 are similarly allowable over Farmer et al.

In summary, applicant believes that the case, in its present form, is now in condition for allowance. If for some reason or other the Examiner does not agree that the case is ready to issue and that an interview or telephone conversation would further the prosecution, the Examiner is invited to contact applicant's attorney at the telephone number listed below.

Respectfully submitted,

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610-346-7112

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